Lesson 2:

2.1 Analyze the roof orientation and determine the optimal placement for solar panels.

After a thorough roof inspection, we came to the conclusion.

Step 1

Provide the entire roof construction because the quality of wood is very poor and it cannot carry the weight of the construction of the PV panels. This is very important to ensure quality and safety.

Step 2

Attach the PV panel rails to the renewed roof construction.

Step 3

Install 18x PV panels portrait position.

2.2 Calculate the potential power based on the available roof surface and the angle of inclination.

After measuring the roof surface, we came to the conclusion that 18 PV panels can be installed. A solar panel contains 450 Wp. In total, 18 solar panels have a maximum peak power of 8,100 Wp.

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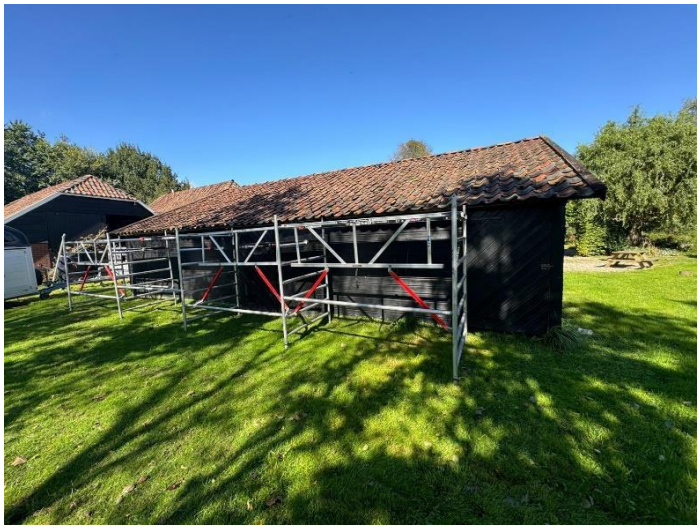
2.1 Describe how weather conditions and shade affect the performance of solar panels.

We will install the entire installation including optimizer, this means that this has no negative effects on the yield of PV panels. Shade and clouds therefore have minimal negative effects on the yield.

Below you will find photos of the entire process.



Pictures: RijnIJssel Nagels

Build scaffolding to work safely.

Pictures: RijnIJssel Nagels

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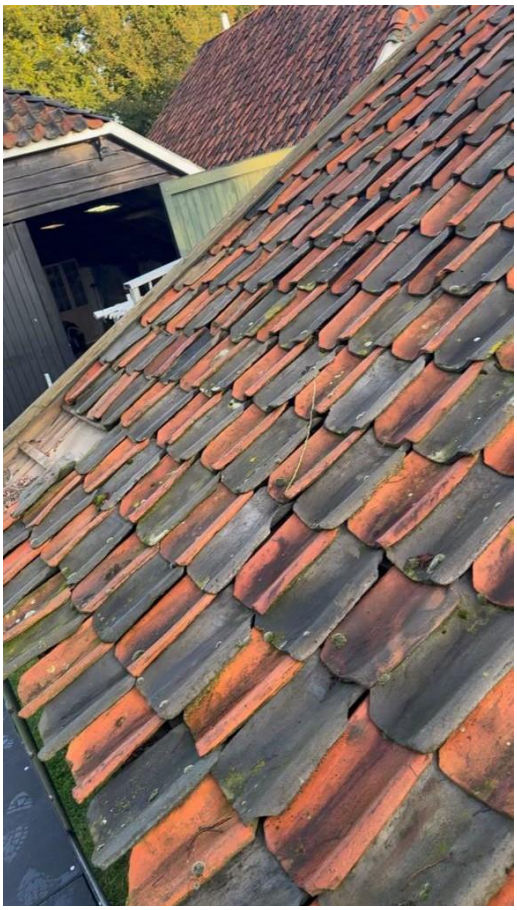

Pictures: RijnIJssel Nagels

Inspection, roof construction is very bad and the tiles are no longer of the right quality. This must be replaced.

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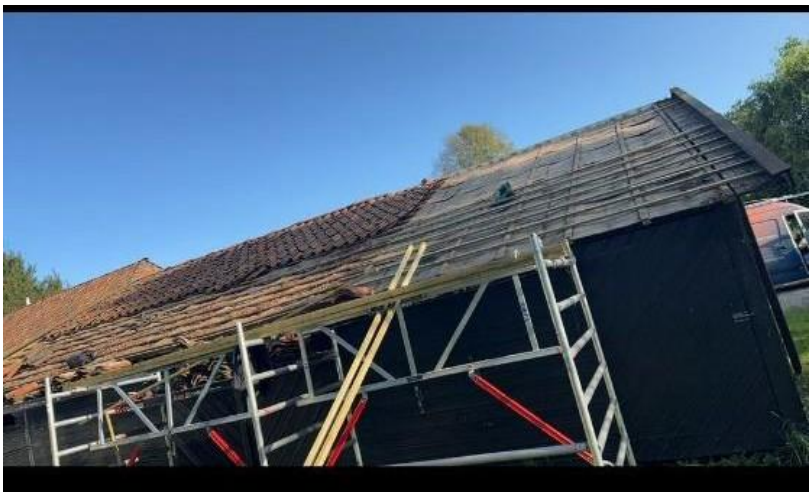
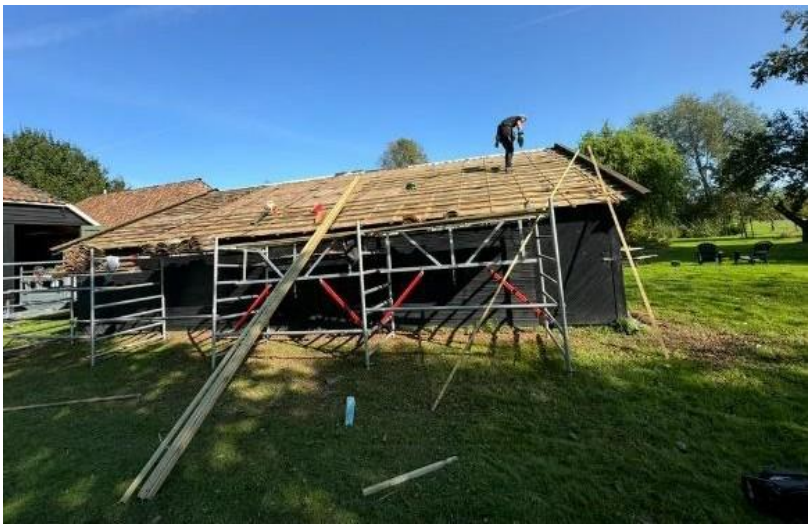


Remove roof tiles.



Remove roof tiles. Entire roof provided with new woodwork.

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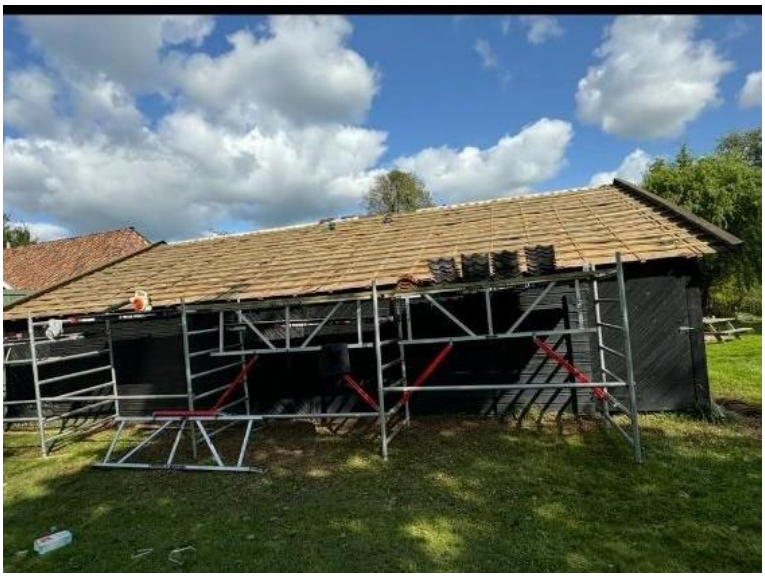
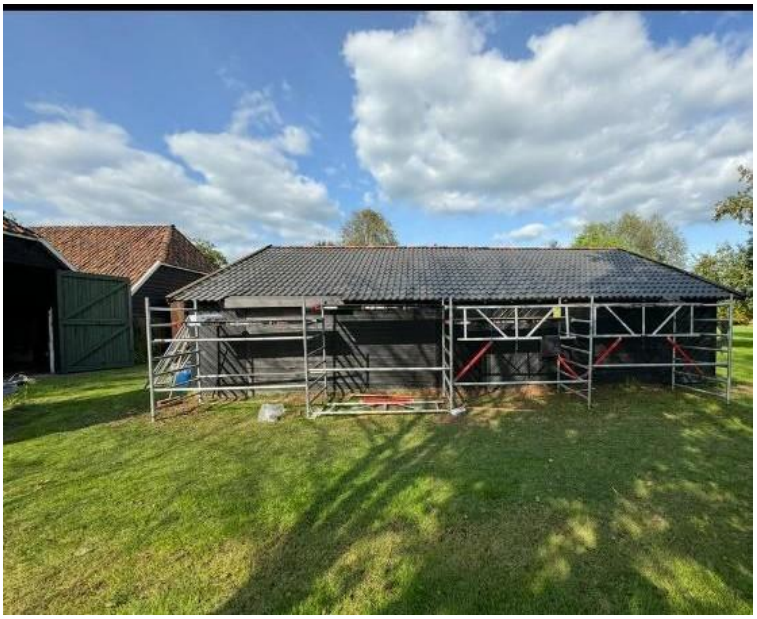


Laying new roof tiles ready.



Installing New Roof Tiles.

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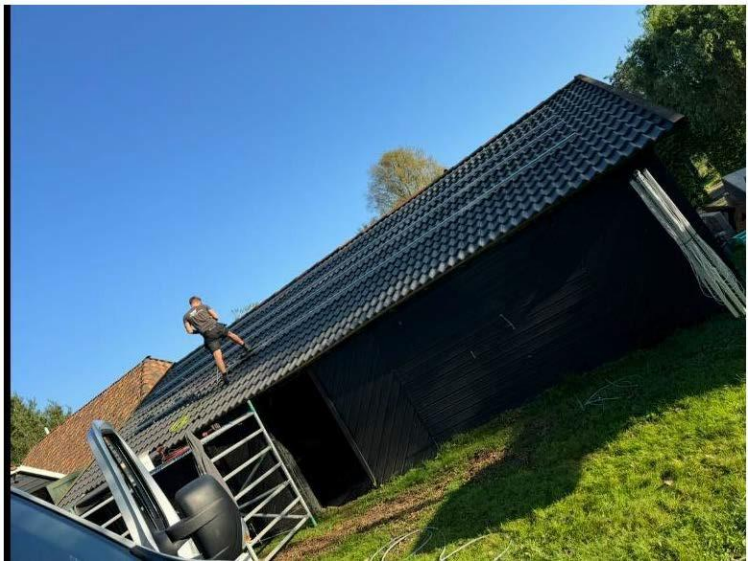

Entire roof fitted with rails to install the PV panels

Installing 18 PV panels.

Pictures: RijnIJssel Nagels

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